AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A data processing apparatus, comprising:

an input portion which accepts input of a print job including image data;

an ~~output~~ print portion which prints the image data to a recording medium;

a plurality of compressing/expanding devices ~~that~~ which compress ~~input data-to-be-output that is inputted from said input portion~~ image data and expand compressed ~~data-to-be-output~~ image data;

a file memory which stores said compressed ~~data-to-be-output, the data-to-be output being~~ image data compressed by ~~some or all of said plurality of~~ the compressing/expanding devices;

a ~~data~~ discrimination portion which discriminates whether ~~said input data-to-be-output is data including a small amount of information or a large amount of information; and~~ the print job is a print job which makes plural prints of the image data;

~~a transfer controller;~~

~~wherein, in cases where it is discriminated by said data discrimination portion that said input data-to-be-output is data including a small amount of information, said transfer controller transfers said input data-to-be-output to said output portion through less than all of said plurality of compressing/expanding devices operating in parallel, and wherein said transfer controller transfers said input data-to-be-output to~~

~~said output portion after said input data-to-be-output has been compressed and~~

~~expanded by said compressing/expanding devices operating in parallel;~~

~~wherein, in cases where it is discriminated by said data discrimination portion~~

~~that said input data-to-be-output is data including a large amount of information, said~~

~~transfer controller transfers said input data-to-be-output to at least some of said~~

~~plurality of compressing/expanding devices while simultaneously transferring said~~

~~input data-to-be-outputted to said output portion.~~

<u>a color/monochrome discrimination portion which discriminates whether the image data is color data or monochrome data; and</u>

<u>a compressing/expanding controller which selects one of a first mode, a second mode, and a third mode, wherein</u>

<u>a) in the first mode, a part of the plurality of compressing/expanding devices is allotted to compression operation compressing/expanding devices for compressing the image data and the other part or remaining compressing/expanding devices are allotted to expansion operation compressing/expanding devices for expanding the image data, and the compression operation compressing/expanding devices and the expansion operation compressing/expanding devices are operated in parallel,</u>

<u>b) in the second mode, all of the plurality of compressing/expanding devices are allotted to compression operation compressing/expanding devices for compressing the image data and operated as compression operation compressing/expanding devices, and</u>

<u>c) in the third mode, all of the plurality of compressing/expanding devices are allotted to expansion operation compressing/expanding devices for expanding the image data and operated as expansion operation compressing/expanding devices,</u>

wherein in cases where it is discriminated by the discrimination portion that the print job is a print job which makes plural prints of the image data and the color/monochrome discrimination portion discriminates that the image data is monochrome data,

the plurality of compressing/expanding devices are operated in the first mode, and

the image data is transferred to the part of the compression operation compressing/expanding devices as image data for a first print, second and subsequent prints, and

wherein in cases where it is discriminated by the discrimination portion that the print job is a print job which makes plural prints of the image data and it is discriminated by the color/monochrome discrimination portion that the image data is color data,

the plurality of compressing/expanding devices are operated in the second mode, and

the image data is transferred to the print portion as image data for a first print, and

concurrently the image data is transferred to all of the compression operation compressing/expanding devices as image data for second and subsequent prints.

2. (Currently Amended) The data processing apparatus as recited in claim 1, further comprising a compressing/expanding controller,

wherein, in cases where said input data to be output is data including a small amount of information, said compressing/expanding controller assigns some of said

~~plurality of compressing/expanding devices to compressing operation and assigns~~

~~some or all of the other of said plurality of compressing/expanding devices to~~

~~expanding operation, and~~

~~wherein, in cases where said input data-to-be-output is data including a large~~

~~amount of information, said compressing/expanding controller assigns all of said~~

~~plurality of compressing/expanding devices to compressing operation at the time of~~

~~compressing said input data-to-be-input and to expanding operation at a time of~~

~~expanding said compressed data-to-be-output.~~

<u>wherein in cases where the plurality of compressing/expanding devices are</u>

<u>operated in the first mode, depending on information amount of the image data, the</u>

<u>number of compressing/expanding devices to be allotted to compression operation</u>

<u>compressing/expanding devices and the number of compressing/expanding devices</u>

<u>to be allotted to expansion operation compressing/expanding devices are changed.</u>

3. (Currently Amended)   The data processing apparatus as recited in claim

<u>2</u>1, ~~further comprising an output discrimination portion which discriminates whether~~

~~an outputting operation of said output portion is a first outputting operation or a~~

~~second or subsequent outputting operation,~~

~~wherein, in cases where said input data-to-be-output is data including a small~~

~~amount of information, if it is discriminated by said output discrimination portion that~~

~~said outputting operation of said output portion is a first outputting operation, said~~

~~transfer controller transfers said input data-to-be-output input from said input portion~~

~~to a file memory through some of said plurality compressing/expanding devices~~

~~assigned to a compressing operation and further transfers said compressed data-to-~~

~~be output to said output portion through at least some of the other of said plurality of~~

~~compressing/expanding devices assigned to the expanding operation, and if it is~~

~~discriminated by said output discrimination portion that an outputting operation of~~

~~said output portion is a second or subsequent outputting operation, said transfer~~

~~controller transfers compressed data-to-be-output stored in said file memory to said~~

~~output portion through said some or all of the other of said plurality of~~

~~compressing/expanding devices assigned to expanding operation, and~~

~~wherein, in cases where said input data-to-be-output is data including a large~~

~~amount of information, if it is discriminated by said output discrimination portion that~~

~~said outputting operation of said output portion is a first outputting operation, said~~

~~transfer controller transfers said input data-to-be-output that is input from said input~~

~~portion to a file memory through all of said plurality compressing/expanding devices~~

~~assigned to compressing operation while simultaneously transferring said input data-~~

~~to-be-output to said output portion, and if it is discriminated by said output~~

~~discrimination portion that said outputting operation of said output portion is a second~~

~~or subsequent outputting operation, said transfer controller transfers compressed~~

~~data-to-be-output stored in said file memory to said output portion through all of said~~

~~plurality of compressing/expanding devices assigned to expanding operation.~~

<u>wherein the image data transferred to the part of compression operation</u>

<u>compressing/expanding devices as image data for the first print, second and</u>

<u>subsequent prints is compressed by the part of compression operation</u>

<u>compressing/expanding devices and stored in the file memory, thereafter the</u>

<u>compressed image data stored in the file memory is transferred to the other part or</u>

<u>remaining expansion operation compressing/expanding devices and expanded, and</u>

the expanded image data is transferred to the print portion to be printed.

4. (Currently Amended)   The data processing apparatus as recited in claim 1, wherein ~~said input data-to-be-output including a small amount of information is monochrome data and said input data-to-be-output including a large amount of information is color data, and wherein said data discrimination portion discriminates whether said input data-to-be-output is said monochrome data or said color data.~~

in cases where it is discriminated by the discrimination portion that the print job is a print job which makes plural prints of the image data and that it is discriminated by the color/monochrome discrimination portion that the image data is color data,

the image data transferred to all of compression operation compressing/expanding devices as image data for second and subsequent prints is compressed by all of the compression operation compressing/expanding devices and stored in the file memory, and thereafter

the plurality of compressing/expanding devices are operated in the third mode, the compressed image data stored in the file memory is transferred to all of expansion operation compressing/expanding devices and expanded, and the expanded image data is transferred to the print portion to be printed.

5-7. (Cancelled)

8. (Previously Presented)   A data processing method, comprising:

discriminating whether input data-to-be-output is data including a small amount of information or a large amount of information;

executing a compressing operation of said input data-to-be-output and expanding operation of compressed data-to-be-output by less than all of a plurality of compressing/expanding devices operating in parallel, and thereafter transferring said input data-to-be-output to an output portion and executing an outputting on the expanded data-to-be-output in cases where it is discriminated that said input data-to-be-output is data including a small amount of information; and

executing the compressing operation of said input data-to-be-output while simultaneously executing the outputting operation of said input data-to-be-output in cases where it is discriminated that said input data-to-be-output is data including a large amount of information.

9. (Previously Presented) The data processing method as recited in claim 8, wherein, in cases where it is discriminated that said input data-to-be-output is data including a small amount of information, some of said plurality of expanding/compressing devices are assigned to the compressing operation and some or all of the other of said plurality of the expanding/compressing devices are assigned to expanding operation, and

wherein, in cases where it is discriminated that said input data-to-be-output is data including a large amount of information, all of said plurality of expanding/compressing devices are assigned to the compressing operation at the time of compressing a input data-to-be-input and to the expanding operation at a time of expanding said compressed data-to-be-input.

10. (Previously Presented)   The data processing method as recited in claim 9, wherein it is discriminated whether said outputting operation is a first outputting operation or a second or subsequent outputting operation,

wherein, in cases where said input data-to-be-output is data including a small amount of information, if it is discriminated that said outputting operation is a first outputting operation, said inputted data-to-be-output is transferred to a file memory through some of said plurality compressing/expanding devices assigned to compressing operation and then output through some or all of the other of said plurality of compressing/expanding devices assigned to expanding operation, and if it is discriminated that said outputting operation is a second or subsequent outputting operation, said compressed data stored in said file memory is output through said some or all of the other of said plurality of compressing/expanding devices assigned to the expanding operation, and

wherein, in cases where said input data-to-be-output is data including a large amount of information, if it is discriminated that said outputting operation is a first outputting operation, input data-to-be-output is transferred to a file memory through all of said plurality compressing/expanding devices assigned to compressing operation while simultaneously transferring said input data-to-be-output to an output portion, and if it is discriminated that said outputting operation is a second or subsequent set of outputting operation, compressed data stored in said file memory is transferred to said output portion through all of said plurality of compressing/expanding devices assigned to expanding operation.

11. (Previously Presented) The data processing method as recited in claim 8, wherein said input data-to-be-output including a small amount of information is monochrome data and said input data-to-be-output including a large amount of information is color data, and wherein data discrimination is performed by discriminating whether said input data-to-be-output is said monochrome data or said color data.

12. (Previously Presented) The data processing method as recited in claim 8, wherein said input data-to-be-output including a small amount of information is binary data and said input data-to-be-output including a large amount of information is multi-valued data, and wherein data discrimination is performed by discriminating whether said input data-to-be-output is said binary data or said multi-valued data.

13. (Original) The data processing method as recited in claim 12, wherein said binary data includes binarized color data.

14. (Previously Presented) The data processing method as recited in claim 9, wherein, in cases where said input data-to-be-output is data including a small amount of information, operational assignment of said plurality of compressing/expanding devices is changed depending on an amount of information.

15. (Previously Presented) An image forming apparatus, comprising:

a scanner which outputs an original image by converting into electronic data with a photoelectric transferring element;

an input port which receives a print job from an external device including a

computer and a facsimile apparatus;

an input adjusting portion which receives a scanned image job outputted from

said scanner and a print job inputted into said input port;

a plurality of compressing/expanding devices which compress input data-to-

be-output included in a job inputted from said input adjusting portion and expand

compressed data-to-be-output;

a storage which stores said compressed data-to-be-output;

a printer which prints out data-to-be-output, said data-to-be outputted being

included in said print job or said scanned image job on a sheet;

a data discrimination portion which discriminates whether said input data-to-

be-output is data including a small amount of information or a large amount of

information; and

a transfer controller;

wherein, in cases where it is discriminated by said data discrimination portion

that said input data-to-be-output is data including a small amount of information, said

transfer controller transfers said input data-to-be-output to said printer through less

than all of said plurality of compressing/expanding devices operating in parallel, and

after being compressed and expanded by said compressing/expanding devices

operating in parallel, transfers said input data-to-be-output to an output portion;

wherein, in cases where it is discriminated by said data discrimination portion

that said input data-to-be-output is data including a large amount of information, said

transfer controller transfers said input data-to-be-output to at least some of said

plurality of compressing/expanding devices while simultaneously transferring said data-to-be-output to an output portion.

16. (Previously Presented)   The image forming apparatus as recited in claim 15, further comprising a compressing/expanding controller,

wherein, in cases where said input data-to-be-output is data including a small amount of information, said compressing/expanding controller assigns some of said plurality of compressing/expanding devices to compressing operation and assigns some or all of the other of said plurality of compressing/expanding devices to expanding operation, and

wherein, in cases where said input data-to-be-output is data including a large amount of information, said compressing/expanding controller assigns all of said plurality of compressing/expanding devices to compressing operation at a time of compressing a data-to-be-inputted and assigns all of said plurality of compressing/expanding devices to expanding operation at the time of expanding said compressed data-to-be-output.

17. (Previously Presented)   The image forming apparatus as recited in claim 16, further comprising an output discrimination portion which discriminates whether an outputting operation of said printer is a first set of outputting operation or a second or subsequent outputting operation,

wherein, in cases where said input data-to-be-output is data including a small amount of information, if it is discriminated by said output discrimination portion that said outputting operation of said printer is a first outputting operation, said transfer

controller transfers said input data-to-be-output to said storage through some of said

plurality compressing/expanding devices assigned to a compressing operation and

further transfers said compressed data-to-be-output to said printer through some or

all of the other of said plurality of compressing/expanding devices assigned to

expanding operation, and if it is discriminated by said output discrimination portion

that said output from said printer is a second or subsequent output, said transfer

controller transfers compressed data-to-be-output stored in said storage to said

printer through said some or all of the other of said plurality of

compressing/expanding devices assigned to expanding operation, and

wherein, in cases where said input data-to-be-output is data including a large

amount of information, if it is discriminated by said output discrimination portion that

said outputting operation of said printer is a first outputting operation, said transfer

controller transfers said input data-to-be-output to said storage through all of said

plurality compressing/expanding devices assigned to compressing operation while

simultaneously transferring said input data-to-be-output to said printer, and if it is

discriminated by said output discrimination portion that said outputting operation of

said printer is a second or subsequent outputting operation, said transfer controller

transfers compressed data-to-be-output stored in said storage to said printer through

all of said plurality of compressing/expanding devices assigned to expanding

operation.

18. (Previously Presented) The image forming apparatus as recited in claim

15, wherein said input data-to-be-output including a small amount of information is

monochrome data and said input data-to-be-output including a large amount of

information is color data, and wherein said data discrimination portion discriminates whether said input data-to-be-output is said monochrome data or said color data.

19. (Previously Presented) The image forming apparatus as recited in claim 15, wherein said input data-to-be-output including a small amount of information is binary data and said input data-to-be-output including a large amount of information is multi-valued data, and wherein said data discrimination portion discriminates whether said input data-to-be-output is said binary data or said multi-valued data.

20. (Original) The data processing apparatus as recited in claim 19, wherein said binary data includes binarized color data.

21. (Previously Presented) The data processing apparatus as recited in claim 16, wherein, in cases where said input data-to-be-output is data including a small amount of information, said compressing/expanding controller further changes operational assignment of said plurality of compressing/expanding devices depending on an amount of information.

22. (New) An image forming apparatus, comprising:
the data processing apparatus of claim 1.